Fig 1

**METHOD TO PRODUCE AN ANTITUMORAL IMMUNE RESPONSE IN CANCER PATIENTS THROUGH A DOUBLE VACCINATION PREVIOUS TREATMENT OF PATIENTS IN ORDER TO ENHANCE THE TUMOR SPECIFIC ANTIGENICITY**

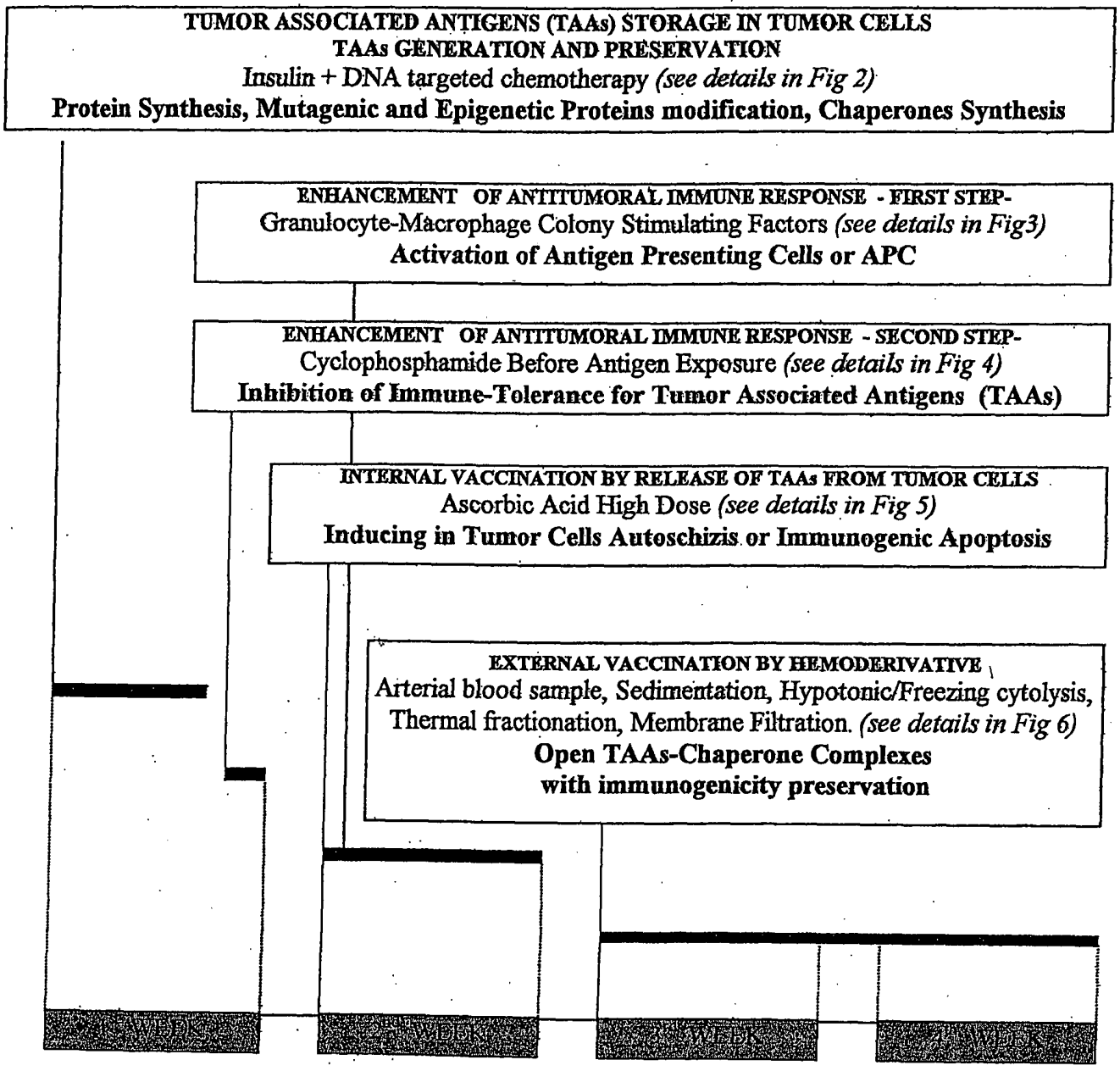


Fig 2

**TUMOR ASSOCIATED ANTIGENS (TAAs) STORAGE IN TUMOR CELLS**
**TAAs GENERATION AND PRESERVATION**

**Protein Synthesis, Mutagenic and Epigenetic Proteins modification, Chaperones Synthesis. Selectivity of Tumor Cells by High Expression of Receptors for Insulin-like Growth Factors**
**Days 1-4**
**Insulin 0.3 U / K Body Weigh**
**+**
**Cyclophosphamide 200 mg, Methotrexate12.5 mg, Fluorouracil 250 mg**

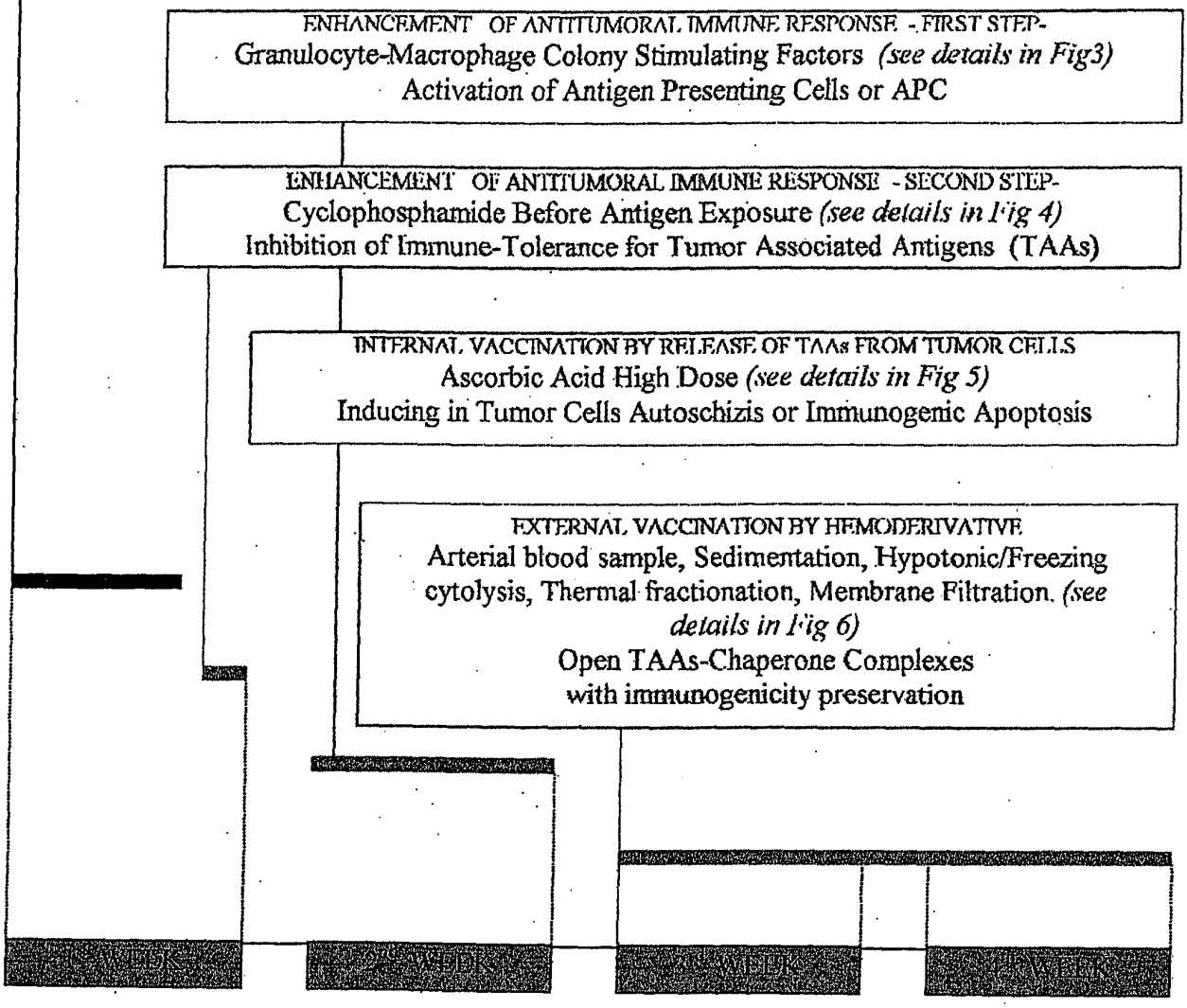


**Fig 3**

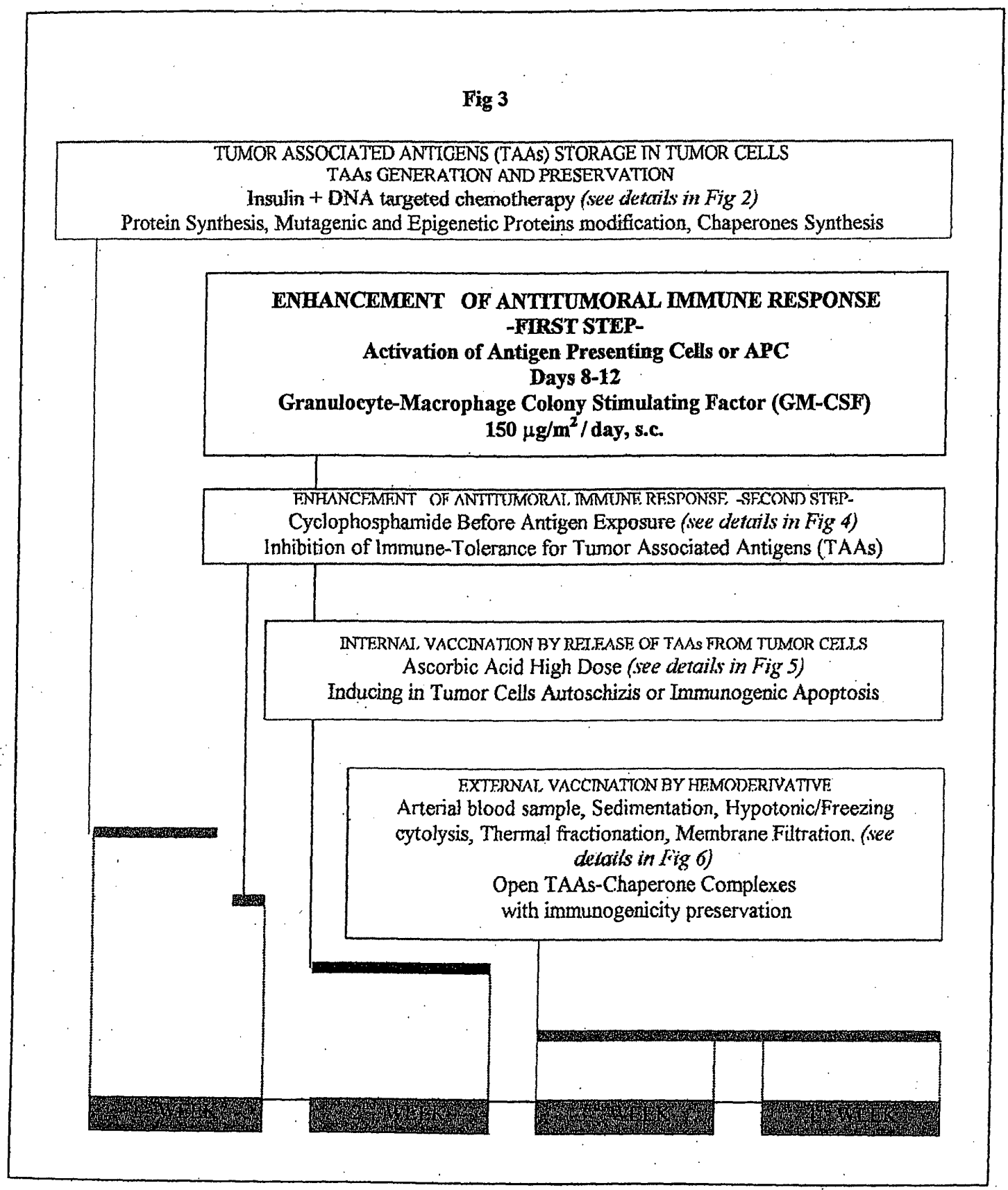

TUMOR ASSOCIATED ANTIGENS (TAAs) STORAGE IN TUMOR CELLS
TAAs GENERATION AND PRESERVATION
Insulin + DNA targeted chemotherapy (see details in Fig 2)
Protein Synthesis, Mutagenic and Epigenetic Proteins modification, Chaperones Synthesis
ENHANCEMENT OF ANTITUMORAL IMMUNE RESPONSE
-FIRST STEP-
Activation of Antigen Presenting Cells or APC
Days 8-12
Granulocyte-Macrophage Colony Stimulating Factor (GM-CSF)
150 μg/m² / day, s.c.
ENHANCEMENT OF ANTITUMORAL IMMUNE RESPONSE -SECOND STEP-
Cyclophosphamide Before Antigen Exposure (see details in Fig 4)
Inhibition of Immune-Tolerance for Tumor Associated Antigens (TAAs)
INTERNAL VACCINATION BY RELEASE OF TAAs FROM TUMOR CELLS
Ascorbic Acid High Dose (see details in Fig 5)
Inducing in Tumor Cells Autoschizis or Immunogenic Apoptosis
EXTERNAL VACCINATION BY HEMODERIVATIVE
Arterial blood sample, Sedimentation, Hypotonic/Freezing cytolysis, Thermal fractionation, Membrane Filtration. (see details in Fig 6)
Open TAAs-Chaperone Complexes
with immunogenicity preservation

**Fig 4**

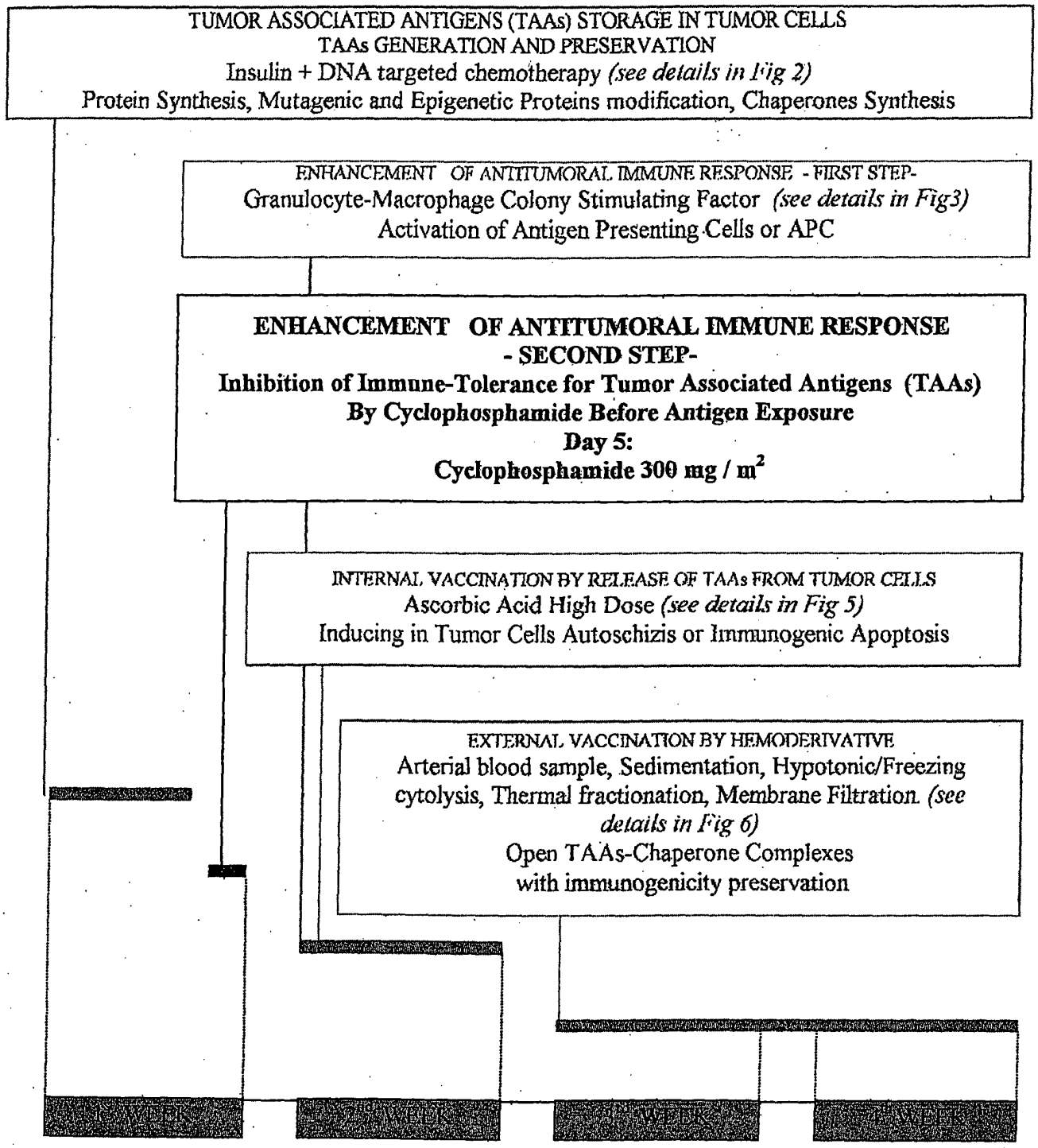

TUMOR ASSOCIATED ANTIGENS (TAAs) STORAGE IN TUMOR CELLS
TAAs GENERATION AND PRESERVATION
Insulin + DNA targeted chemotherapy (see details in Fig 2)
Protein Synthesis, Mutagenic and Epigenetic Proteins modification, Chaperones Synthesis
ENHANCEMENT OF ANTITUMORAL IMMUNE RESPONSE - FIRST STEP-
Granulocyte-Macrophage Colony Stimulating Factor (see details in Fig3)
Activation of Antigen Presenting Cells or APC
ENHANCEMENT OF ANTITUMORAL IMMUNE RESPONSE
- SECOND STEP-
Inhibition of Immune-Tolerance for Tumor Associated Antigens (TAAs)
By Cyclophosphamide Before Antigen Exposure
Day 5:
Cyclophosphamide 300 mg / m2
INTERNAL VACCINATION BY RELEASE OF TAAs FROM TUMOR CELLS
Ascorbic Acid High Dose (see details in Fig 5)
Inducing in Tumor Cells Autoschizis or Immunogenic Apoptosis
EXTERNAL VACCINATION BY HEMODERIVATIVE
Arterial blood sample, Sedimentation, Hypotonic/Freezing cytolysis, Thermal fractionation, Membrane Filtration. (see details in Fig 6)
Open TAAs-Chaperone Complexes
with immunogenicity preservation

**Fig 5**

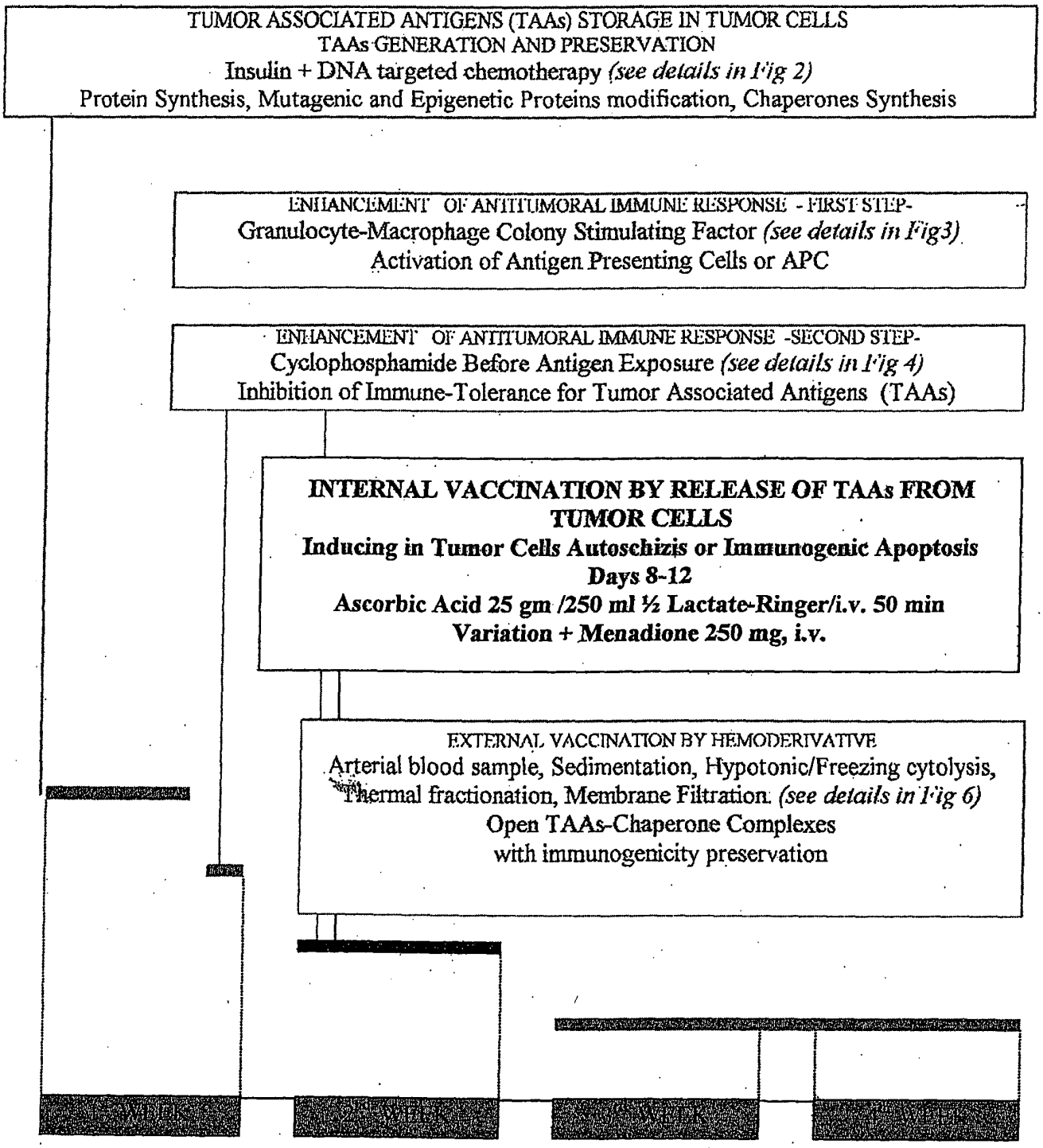
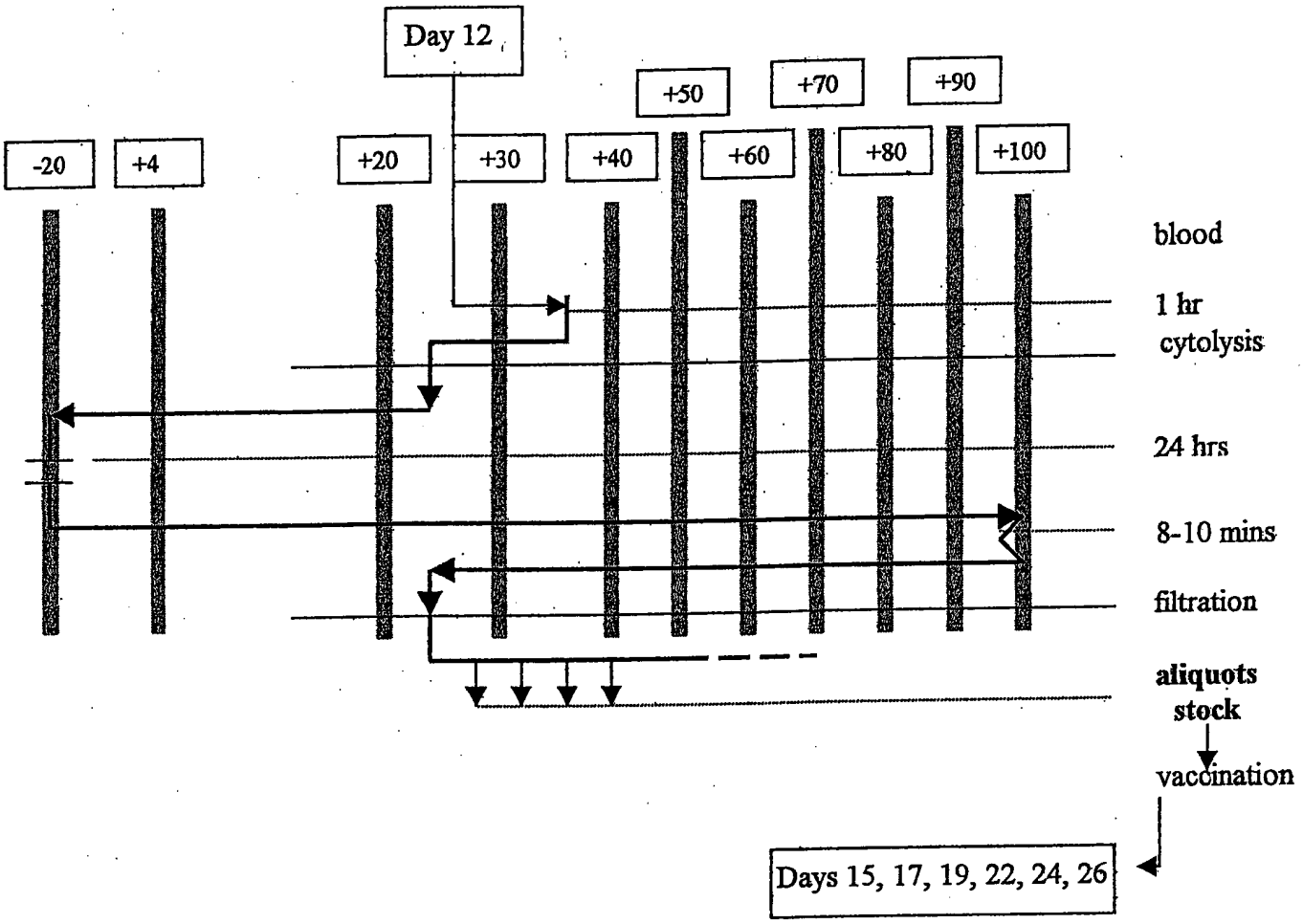

TUMOR ASSOCIATED ANTIGENS (TAAs) STORAGE IN TUMOR CELLS
TAAs GENERATION AND PRESERVATION
Insulin + DNA targeted chemotherapy (see details in Fig 2)
Protein Synthesis, Mutagenic and Epigenetic Proteins modification, Chaperones Synthesis
ENHANCEMENT OF ANTITUMORAL IMMUNE RESPONSE - FIRST STEP-
Granulocyte-Macrophage Colony Stimulating Factor (see details in Fig3)
Activation of Antigen Presenting Cells or APC
ENHANCEMENT OF ANTITUMORAL IMMUNE RESPONSE -SECOND STEP-
Cyclophosphamide Before Antigen Exposure (see details in Fig 4)
Inhibition of Immune-Tolerance for Tumor Associated Antigens (TAAs)
INTERNAL VACCINATION BY RELEASE OF TAAs FROM TUMOR CELLS
Inducing in Tumor Cells Autoschizis or Immunogenic Apoptosis
Days 8-12
Ascorbic Acid 25 gm /250 ml ½ Lactate-Ringer/i.v. 50 min
Variation + Menadione 250 mg, i.v.
EXTERNAL VACCINATION BY HEMODERIVATIVE
Arterial blood sample, Sedimentation, Hypotonic/Freezing cytolysis,
Thermal fractionation, Membrane Filtration (see details in Fig 6)
Open TAAs-Chaperone Complexes
with immunogenicity preservation

Fig 6

## EXTERNAL VACCINATION BY HEMODERIVATIVE

**Arterial blood sample, Sedimentation, Hypotonic/Freezing cytolysis, Thermal fractionation, Membrane Filtration in order to obtain a composition for sub-cutaneous vaccination with TAAs released from SSP complexes with immunogenicity preserved.**




ALL TEMPERATURES ARE EXPRESSED IN $^{0}$C (CELSIUS DEGREES)